Purpose

To assist patients in acquiring and maintaining the knowledge, skills, and behaviors to successfully meet the challenges of daily diabetes self-management. Adequate nutrition advice or an individualized meal plan will assist patients in achieving optimal blood glucose control. A referral to a registered dietitian skilled in the complexities of diabetes management is strongly recommended.

Goals

- Achieve and maintain near normal blood glucose levels as well as optimal lipid and blood pressure levels.
- Prevent and treat the acute and long-term complications of diabetes
- Improve overall health through optimum nutrition and physical activity.
- Address individual needs, considering cultural preferences, lifestyle, and ability to change.
- Provide for the needs of special populations
  - Youth with type 1 or type 2 diabetes
  - Pregnant and lactating women
  - Older adults
  - Individuals treated with insulin and insulin secretagogues
  - Individuals at risk for developing diabetes
  - Individuals with deteriorating renal function

Basic Education

For newly diagnosed patients or patients not recently educated about their diabetes. Basic survival skills should include:

- Relationship of food and meals to blood glucose levels, medication, and activity
- Basic food/meal plan guidelines
- Consistent times each day for meals and snacks
- Recognition, prevention, and treatment of hypoglycemia
- Sick day management
- Self-monitoring of blood glucose

Essential Education for Ongoing Nutrition Self-Management

For patients recently diagnosed with diabetes who have been taught basic survival skills or those who have not received current nutrition education. Others who may benefit from nutrition self-management education include patients having difficulties with diabetes management or those experiencing changes in lifestyle, medication, weight, or childbearing status. Follow-up sessions should focus on increasing the patient's knowledge, skills, and flexibility as he or she gains experience living with diabetes.

Topics include:

- Sources of nutrients and their effect on blood glucose and lipid levels
- Carbohydrate counting, when appropriate
- Label reading and grocery shopping guidelines
- Dining out
- Modifying fat intake
- Use of sugar-containing foods, dietetic foods, and sweeteners
- Alcohol guidelines
- Using blood glucose self-monitoring for glucose pattern control
- Adjusting meal times
- Adjusting food for exercise
- Special occasions, holidays
- Travel, schedule changes
- Vitamin and mineral supplementation

Modified from the American Diabetes Association (Position Statement). Evidence-Based Nutrition Principles and Recommendations for the Treatment and Prevention of Diabetes and Related Complications, Diabetes Care 26 (Supplement 1): S51-S61, 2003.

Purpose

The main aims of diabetes education are to provide patients with the management skills necessary to achieve optimal control of their diabetes, and to assist them in becoming effective self-directed decision makers for their own diabetes care, health, and well being. Without comprehension of the relationship between home blood glucose readings, meal planning, and physical activity, patients with diabetes will be hindered in their ability to achieve optimal blood glucose control, and are at higher risk for long term complications. A referral to a nurse or other clinician who has expertise in diabetes self-management education is strongly recommended.

Goals

- Prevent the acute complications of diabetes, hyper- and hypoglycemia
- Prevent or delay the chronic complications of diabetes
- Promote healthy birth outcomes through preconception counseling, monitoring, and support during and following pregnancy
- Enhance patient participation in the clinician's diabetes treatment plan and improve patient confidence in self-management skills
- Enhance psychosocial adjustment to living with a chronic disease
- Decrease health care costs by reducing the need for expensive hospital stays and the treatment of complications

Basic Education (Survival Skills)

Overview

- Nature of diabetes in terms of chronicity and metabolism
- Differences between type 1 and type 2 diabetes
- Balance of meals, physical activity, and medication, if prescribed

Exercise

- Impact of exercise on blood glucose, lipid levels, hypertension, weight, and stress reduction

Acute Complications

- Hypoglycemia recognition, causes, treatment, and prevention
- Hyperglycemia recognition, causes, treatment, and prevention
- Sick day management

Oral Medication Management

- Action, side effects, timing of dose(s), interactions

Insulin Management

- Action, dosage, onset/peak/duration, pre-loading, mixing, injecting, site selection, storage, syringe disposal
- Use of Glucagon, if appropriate

Psychosocial

- Assess adjustment to lifestyle change, screen for depression, refer to counseling as needed

Self-Monitoring

- Blood glucose meter selection and orientation
- Time(s) to check blood sugar/rationale
- Recording and interpretation of results, encouraging dialog with clinician
- Disposal of lancets and contaminated materials
- Performance of urinary ketone testing, if appropriate

Continuing Education

Overview

- Benefits of optimal diabetes control and factors that influence it
- Effects of insulin resistance, deficiency, and excess
- Treatment of insulin resistance through weight loss, activity, and medication

Exercise

- Exercise planning appropriate to age, ability, interest, and willingness
- Complication avoidance during exercise

Oral Medication Management

- Action times and maximum dose
- Influences of other medications on blood glucose and possible interactions with oral diabetes medications

Insulin Management

- Methods of storing and adjusting insulin during travel
- Syringe reuse: techniques, benefits, and risks
- Traveling with diabetes, transporting supplies, and medication adjustment

Self-Monitoring

- Use of self-monitoring of blood glucose to adjust the treatment plan based on approved guidelines
- Establish glycated hemoglobin targets

Complication Prevention and Recognition

- Self foot care, early detection of problems, and importance of timely access to care
- Early recognition of eye disease and need for complete eye exam annually
- Impact of lipids, importance of monitoring annually or every two years if values fall within accepted risk levels
- Importance of blood pressure control, need for regular monitoring
- Identification of the symptoms, treatment, and major factors of preventing kidney disease, peripheral vascular disease, cardiovascular disease, periodontal disease, and neuropathy
- Importance of pneumonia vaccine and yearly flu vaccine
- Smoking cessation